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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/016,705	12/10/2001	Valdemar Portney	L-1609	4429
7590	04/13/2005			
Howard R. Lambert 5245 Gatewood Lane Anaheim, CA 92807			EXAMINER MILLER, CHERYL L	
			ART UNIT	PAPER NUMBER
			3738	

DATE MAILED: 04/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/016,705	Applicant(s) PORTNEY, VALDEMAR	
	Examiner Cheryl Miller	Art Unit 3738	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 January 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 and 28-35 is/are pending in the application.
- 4a) Of the above claim(s) 7-9, 13-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 16-19, and 28-35 is/are rejected.
- 7) ☒ Claim(s) 6 and 10-12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 1/31/05 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments filed January 30, 2005 have been fully considered but some have not been found persuasive.

The applicant has argued that Rizzo, III. et al. (US 6,120,538) does not disclose a band that is elastic (when referring to claim 28). The examiner disagrees. Rizzo discloses the band 14 may be in the form of a transitional gel, which acts as an artificial muscle (thus elastic when expanding and contracting) see col.1, lines 44-48).

The applicant has argued that Turley (US 4,892,543) does not disclose a lens shaping member which contact the lens (when referring to claims 1 and 28). The examiner disagrees. As seen in figure 2, lens shaping member/static haptic (54) is located adjacent lens (84). And because Turleys haptics spring toward and away from one another, the anterior portion of lens shaping member/static haptic (54) is adapted to contact the lens (84) upon compression of the two lenses together. Also, whether or not portions touch the eye is irrelevant, since this is intended use language. The structure of Turley may be placed anywhere, and may contact portions of the eye.

Applicant's arguments with respect to claims 29-35 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 29 is rejected under 35 U.S.C. 102(b) as being anticipated by Thompson (US 5,607,472, cited previously). Thompson discloses an accommodating IOL system (22) comprising a lens (23) having an elastically deformable curved surface (33), and an elongate elastic member (flexible flaps-inherently elastic since they accommodate along with the shape of the moving capsular bag to which they are attached) having a first portion (34) and a second portion (37), the second portion (37) at least partially overlapping the first portion (34, overlaps when attached to the bag), the elastic member extending at least partially around a circumference of the lens (seen in fig.3B), the elastic member coupled to the lens (23) and configured upon implantation to respond to muscles to act on the circumference of the lens to change the curvature of the lens surface.

Claims 1-5, 17-19, and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Turley (US 4,892,543, cited by applicant in IDS). Referring to claim 1, Turley discloses an accommodating IOL (40) comprising a deformable elastic dynamic lens (84) having a surface curvature (curvature of 86), a lens-shaping member (54) having flexible portions (all of 54 is flexible) in contact with the dynamic lens (84) for enabling deformation of the dynamic lens for changing the surface curvature (curvature of 86 changes), an elastically flexible member (70, 72) in contact with the lens-shaping member (54) flexible portions, and first (60) and second (46)

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lens supporting members, the first lens supporting member (60) having a proximal end region (one side of 60) engaging the flexible member (70, 72) and a distal end region (other side of 60), the second lens supporting member (46) having a proximal end region (one side of 46) connected to the lens-shaping member (54) and distal end region (other side of 46), the distal end region of the first lens supporting member (60) being configured upon implantation to engage a first region of the individual's eye (top of capsule or area near iris) that is responsive to contraction and relaxation of a ciliary muscle disposed in a ciliary body region of the individual's eye.

Referring to claim 2, Turley discloses a distal end region of the second lens supporting member (46) configured to engage a second region of the eye (bottom of capsule or near there), the first and second regions generally centered on a single meridian that passes through an optical axis of the dynamic lens (86).

Referring to claim 3, Turley discloses first (60) and second (46) lens supporting members being relatively rigid as compared with the dynamic lens (84), (Turley's lens 86 has a fluid filled chamber and is less rigid than all other solid parts within the IOL system).

Referring to claim 4, Turley discloses a proximal end region of the second lens supporting member (46) rigidly connected to the lens-shaping member (54; fig.2).

Referring to claim 5, Turley discloses the lens-shaping member (54) and the second lens supporting member (46) constructed in one piece (fig.2).

Referring to claims 17-18, Turley discloses a dynamic lens (84) comprising silicone or acrylic and a lens-shaping member (54) and supporting members (60, 46) comprising PMMA (col.3, lines 12-19).

Referring to claim 19, Turley discloses a second lens supporting member (46) including a static, non-accommodating lens having an optical axis aligned with an optical axis of the dynamic lens (fig.2, 4, 6).

Referring to claim 28, Turley discloses an accommodating IOL (40) comprising a dynamic lens (84) having an elastically deformable curved surface (86), a static haptic (54) having a flexible portion in contact with the dynamic lens and configured to engage upon implantation, a first region of the eye, an elastic member (80, 82) in contact with the flexible portion of the static haptic (54), and a dynamic haptic (70, 72) coupled to the elastic member (80, 82) and configured to engage upon implantation, a second region of the eye responsive to contraction and relaxation of a ciliary muscle of the eye, whereby the dynamic haptic (70, 72) is configured upon implantation, to deform in response to contraction and relaxation of the ciliary muscle, thereby deforming the elastic member (80, 82) and the flexible portion of the static haptic (54), and changing the curvature of the curved surface (86) of the dynamic lens (84).

Claims 28-29, 31-32, and 35 are rejected under 35 U.S.C. 102(b) as being anticipated by Rizzo, III et al. (US 6,120,538, cited previously). Referring to claim 28, Rizzo discloses an accommodating IOL comprising a dynamic lens (12) having an elastically deformable curved surface, a static haptic (right 26 in fig.1) having a flexible portion in contact with the dynamic lens (12) and configured to engage upon implantation, a first region of the eye, an elastic member (14; band may be in the form of a transitional gel which acts as a muscle, therefore, elastic; col.1, lines 44-47) in contact with the flexible portion of the static haptic (right 26), and a dynamic haptic (left 26 in fig.1) coupled to the elastic member (14) and configured to engage

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upon implantation, a second region of the eye responsive to contraction and relaxation of a ciliary muscle of the eye, whereby the dynamic haptic (26) is configured upon implantation, to deform in response to contraction and relaxation of the ciliary muscle, thereby deforming the elastic member (14) and the flexible portion of the static haptic (26), and changing the curvature of the curved surface of the dynamic lens (12; col.1, lines 39-47).

Referring to claim 29, Rizzo discloses an accommodating IOL system comprising a lens (12) having an elastically deformable curved surface, and an elongate elastic member (14, in the form of a gel; col.1, lines 44-48) having a first portion (considered one half of the elongate member) and a second portion (considered two thirds of the elongate member, the second portion at least partially overlapping the first portion (portion will overlap, since the second portion is considered longer than the first), the elongate member extending at least partially around the circumference of the lens to act on the lens to change its shape (acts as a muscle, col.1, lines 44-48).

Referring to claim 31, Rizzo discloses an accommodating IOL comprising a lens (12) having a deformable surface, and first (26 or 20) and second (14) members coupled together to transfer force from the ciliary muscle to the lens (12), the first member (26 or 20) responsive to actions of the ciliary muscle to apply a force to the second member (14), the second member (14) applying a second force which acts on the circumference of the lens (12) in response to the first force such that the curvature and circumference changes (col.1, lines 39-47; col.3, lines 15-34; fig.1).

Referring to claim 32, Rizzo discloses the second member (14) to at least substantially surround a periphery of the lens (12; see fig.1).

Referring to claim 35, Rizzo discloses the second member (14) to comprise a coil (fig.1; the member coils around the lens).

Claims 29-35 are rejected under 35 U.S.C. 102(b) as being anticipated by Christie et al. (US 4,932,966, cited previously). Referring to claims 29-30, Christie discloses an accommodating IOL system (fig.13) comprising a lens (48) having an elastically deformable curved surface (50), and an elongate elastic member (bladder 70B) having a first portion (one side of bladder) and a second portion (other side of bladder) which overlap (portions may be selected so that they overlap), the elongate member (70B) extending at least partially around a circumference of the lens (fig.13), the member coupled to the lens and configured to respond to action of the ciliary muscle by acting on the circumference of the lens to change the curvature. Christie discloses the elongate member (bladder 70B) to comprise a coil (coil 110 seen to be within an elongate member 70B; fig.13).

Referring to claim 31, Christie discloses an accommodating IOL comprising a lens (48) having a deformable surface (50), and first (walls of bladder 70B) and second (coil 110 or fluid within bladder) members coupled together to transfer force from the ciliary muscle to the lens (48), the first member (walls 70) responsive to action of the ciliary muscle to apply a force to the second member (110 or fluid within bladder 70), the second member (coil or fluid) applying a second force that acts on the circumference of the lens in response, such that both the circumference and curvature of the lens change.

Referring to claim 32, Christie discloses the second member (110 or fluid) to at least substantially surround a periphery of the lens.

Referring to claim 33, Christie discloses a support member (36) coupled to the lens, wherein the lens has a first surface (posterior surface) with a first curvature and a second surface (anterior surface 50) with a second curvature, and wherein the support member (36) supports the lens (48) with the first curvature fixed (fig.7, 13) while the second curvature (50) changes in response to the tension.

Referring to claim 35, Christie discloses the second member (110) to comprise a coil (fig.13).

Allowable Subject Matter

Claims 6 and 10-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cheryl Miller whose telephone number is (571) 272-4755. The examiner can normally be reached on Monday-Friday 7:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Corrine McDermott can be reached on (571) 272-4755. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Cheryl Miller



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PRIMARY EXAMINER